

A new *Charinus* (Amblypygi : Charontidae) from St. John, U.S. Virgin Islands.

Nuevo Charinus (Amblypygi : Charontidae) de St. John, Islas Vírgenes Estadounidenses.

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Abstract

A new species of the charontid genus *Charinus* Simon, 1892 is described from several localities of St. John, U.S. Virgin Islands, West Indies. This species, that has not median eyes, resembles *Charinus tronchonii* (Ravelo, 1975) from eastern Venezuela.

Resumen

Se describe una nueva especie de charónido del género *Charinus* Simon, 1892, la cual procede de varias localidades de St. John, Islas Vírgenes Estadounidenses. Esta especie, que no posee ojos medios, se asemeja a *Charinus tronchonii* (Ravelo, 1975), del oriente venezolano.

Key words: Amblypygi, *Charinus*, taxonomy, Virgin Islands, West Indies.

Palabras claves: Amblypygi, *Charinus*, taxonomía, Islas Vírgenes, Antillas.

INTRODUCTION

At the moment, the genus *Charinus* Simon, 1892, is known in the West Indies for four Cuban species (QUINTERO, 1983). MUCHMORE (1993) recorded an unidentified species of Charinides from St. John, U. S. Virgin Islands. It was able to us examine such material and find that is a new species of the genus *Charinus*.

SISTEMATIC

Charinus muchmorei, new species

(Figs. 1-6)

Charinides sp. MUCHMORE, 1993: 32.

Type data. St. John, U. S. Virgin Islands: Male holotype, male and female paratypes, Cinnamon Bay N. T., 6 June 1980, base of kapok, W. B. Muchmore (WM 5958). Other paratypes: One male, Cinnamon Bay N. T., 4-6 June 1980, litter at base of trees, W. B. Muchmore (WM 5930). Two females, Cinnamon Bay-Centerline Trail, 21 May 1982, under rocks, W. B. Muchmore. Two youngs, Fredenkstal, 16 January 1986, litter along ruins, W. B. Muchmore (WM 6810). One female, St. John, March 1978, W. B. Muchmore. One male and one female, Lameshur Bay-Gray

Grut, 8 June 1979, under rocks, W. B. Muchmore. One female, Trunk Bay, 8-9 June, 1980, among rocks, W. B. Muchmore (WM 5934). One male, Coral Bay, 16 May 1987, under rock, W. B. Muchmore (WM 6165). Two females, Colabash Boom, 16 October 1980, under rocks, W. B. Muchmore (WM 5961). One male and two young, Coral Bay, 10 October 1979, ground litter, W. B. Muchmore (WM 5821). All specimens are deposited at the Florida State Collection of Arthropods, Gainesville, U. S. A.

Distribution. Only known from St. John, U. S. Virgin Islands, West Indies.

Etimology. The specific name is a patronimic honoring Dr. W. B. Muchmore, collector of the type series, and eminent student of pseudoscorpions.

Diagnosis. Like *Charinus tronchonii* (Ravelo, 1975), a Venezuelan cavernicolous species, it has 23 tibial segments in its feeler (leg I), and median eyes absent. Nevertheless, it has 39 tarsal segments in the first pair of legs instead 41. *Charinus muchmorei* n. sp., also differs from *C. tronchonii* in having the distal cusp of the basal cheliceral segment shorter than the proximal cusp.

Description of male holotype. Carapace brownish, lighter on median area. Pedipalp and abdomen pale brown; legs grayish-pale brown.

Carapace. Anterior edge slightly convex, with six pointed setae. About ten short, pointed setae arranged transversally on frontal area. Surface not tuberculate. Frontal process concealed. Median ocular tubercle and median eyes absent. The lateral eyes are pigmented, and well developed, 0,98 mm from each other, 0,35 mm from anterior edge, 0,13 mm to lateral edge.

Chelicerae. First tooth on internal margin of the basal cheliceral segment with proximal cusp distinctly longer than distal.

Pedipalp. Trochanter with two similar spines on anteroventral edge. Femur with three spines dorsally and ventrally (Fd-1 and Fv-1 are the longest, respectively). Tibia with four dorsal spines, Td-3 the longest; ventrally with two spines. Basitarsus with two dorsal spines, and two diminute setiferous tubercles distal to Bd-2. Tarsus with two dorsal spines.

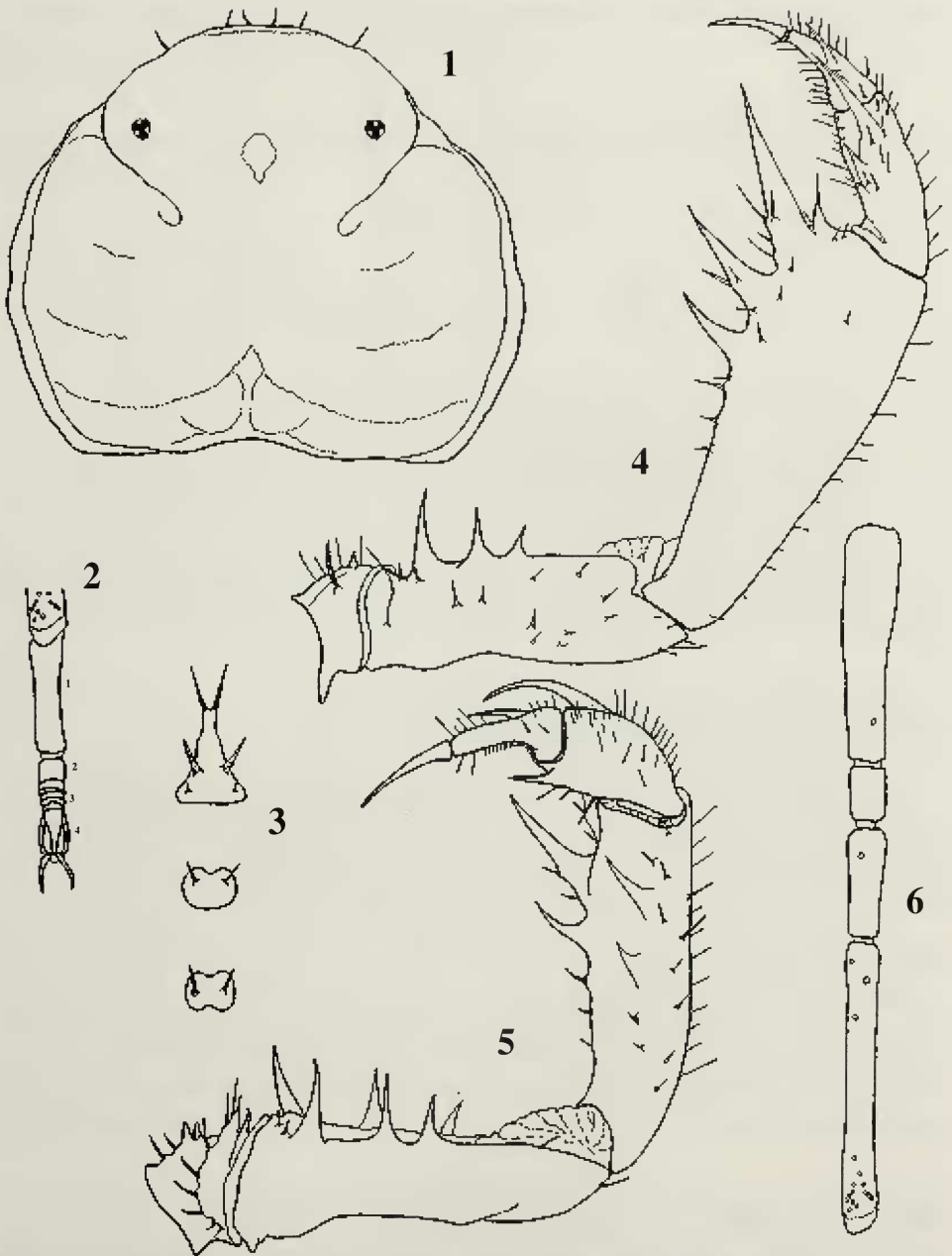
Legs. Feeler with 22 tibial and 37 tarsal segments; proximal tarsal segment 3,3 times length of second tarsomere. Tibia IV trisegmented.

Prosomatic sternites. Tritosternum short, with two apical setae, and two basal ones. Te-trasternum and pentasternum weakly marked, wider than long.

Measurements (in mm). Total length, 4,35; median carapace length, 1,75; maximal carapace length, 1,85; carapace width, 2,40; pedipalp femur length, 1,10; pedipalp tibia length, 1,45; legs: femur I, 3,15; femur II, 2,00; femur III, 2,30; femur IV, 2,00; tibia IV segments from proximal to distal, 0,90/0,25/0,50.

Female. Very likely as male.

Variation. From 12 legs I belonging to 11 specimens, we have obtain the following data concerning tibial and tarsal segments: 7 legs (58%) with 23 tibial segments, 4 (33%) with 22, one leg (8%) with 25; 3 legs (27%) with 37 tarsal segments, 3 legs with 39, 2 (18%) with 38, one (9%) with 33, 2 (young) with 29 tarsal segments. For morphometric variation see Table 1.



Figs. 1-6. *Charinus muchmorei*, n. sp. Male (Coral Bay). 1, Carapace; 2, leg IV tarsus and distal end of metatarsus; 3, prosomatic sternites; 4, right pedipalp, dorsal view; 5, Right pedipalp, ventral view; 6, leg IV tibia and metatarsus, showing trichobothria.

Figs. 1-6. *Charinus muchmorei*, sp. n. Macho (Coral Bay). 1, carapacho; 2, tarso y extremo distal del metatarso de la pata IV; 3, esternitos prosomáticos; 4, pedipalpo derecho, vista dorsal; 5, Pedipalpo derecho, vista ventral; 6, tibia y metatarso de la pata IV, mostrando tricobotrias.

Character	F E M A L E S		M A L E	
Total L	5,25	3,80	3,60	3,75
Median carapace L	1,90	1,45	1,45	1,40
Maximal carapace L	2,15	1,60	1,55	1,50
Carapace W	2,60	2,05	2,15	1,95
Pedipalp femur L	1,10	0,75	0,95	0,75
Pedipalp tibia L	1,60	1,00	1,05	0,95
Leg femur I	3,40	2,20	2,35	2,30
Leg femur II	2,25	1,60	1,60	1,55
Leg femur III	2,70	1,80	1,95	1,75
Leg femur IV	2,10	1,70	1,70	1,65
Leg tibia IV	1,70	-	1,10	1,10

Table 1. Measurements (mm) of *Charinus muchmorei*, n. sp. L, length; W, width.
Tabla 1. Dimensiones (mm) de *Charinus muchmorei*, sp. n. L, longitud; W, ancho.

The largest specimen from Colabash Boom (WM 5961) has three tibial segments on right leg IV, and two on the left. Similar anomalies has been cited for other amblypygids (QUINTERO, 1981; DELLE CAVE, 1986).

Natural history. This species has been collected under rocks, at base of kapok, in ground litter, as well as at base of trees.

Comments. The only previously known Antillean species having 23 tibial segments in its feeler is *Charinus acosta* (QUINTERO, 1983), from Cuba. Nevertheless, it has booth median tubercle and median eyes reduced, as well as 41 tarsal segments on leg I, and proximal tarsal segment of feeler 1.4 times longer than following.

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BIBLIOGRAPHY

- DELLE CAVE, L. 1986. Biospeleology of the Somaliland Amblypygi (Arachnida, Chelicerata) of the caves of Showli and Mugdile (Bardera, Somaliland). *Redia*, 69 : 143-170.
- MUCHMORE, W. B. 1993. List of terrestrial invertebrates of St. John, U. S. Virgin Islands (exclusive of Acarina and Insecta), with some records of freshwater species. *Caribbean J. Sci.*, 29(1-2) : 30-38.
- QUINTERO, D. 1981. The amblypygid genus *Phrynus* in the Americas (Amblypygi: Phrynidae). *J. Arachmol.*, 9 (2) : 117-166.
- QUINTERO, D. 1983. Revision of the amblypygid spiders of Cuba and their relationships with the Caribbean and continental American amblypygid fauna. *Studies Fauna Curacao and other Caribbean Isl.*, 65 : 1-54.